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# The Emotional Projection Test as an Instrument to Differentiate Affective Qualities of Personality Profiles and as a Measure of Affective Change in Four Different Therapy Groups.

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THE EMOTIONAL PROJECTION TEST AS AN INSTRUMENT TO DIFFERENTIATE  
AFFECTIVE QUALITIES OF PERSONALITY PROFILES AND AS A MEASURE OF  
AFFECTIVE CHANGE IN FOUR DIFFERENT THERAPY GROUPS

The Louisiana State University and Agricultural  
and Mechanical Col.

PH.D.

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TO DIFFERENTIATE AFFECTIVE QUALITIES OF PERSONALITY  
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IN FOUR DIFFERENT THERAPY GROUPS

A Dissertation

Submitted to the Graduate Faculty of the  
Louisiana State University and  
Agricultural and Mechanical College  
in partial fulfillment of the  
requirements for the degree of  
Doctor of Philosophy

in

The Department of Psychology

by

John Harvey Wagoner  
B.S., United States Air Force Academy, 1973  
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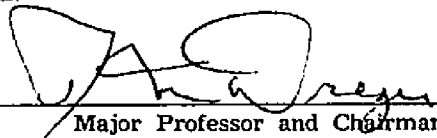
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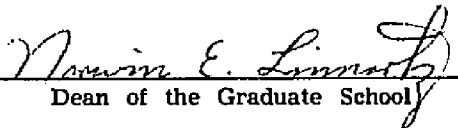
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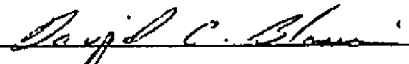

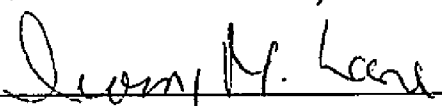

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## ABSTRACT

This study explores the use of the Emotional Projection Test (EPT) as a measure of affective qualities using responses to thirty pictures of facial expressions. The first portion of this study examines the hypothesis that affective change in different therapy groups would be greater for patients matched to the most appropriate group. The second part examines the usefulness of the EPT in differentiating pre-therapy personality profiles. The last part looks at the usefulness of the EPT in differentiating alcoholics from non-alcoholics. Specific hypotheses were made for each portion of this research. The results of the first two parts of this study were generally negative with no significant differences between changes in EPT score with correct treatment placement than with those poorly placed. There were also no significant differences between differing personality profiles on the EPT scores. There were however, significant results in the comparison of alcoholics and control groups. The problem drinkers tended to have more rejections and a greater number of actional rather than emotional responses. Additionally, alcoholics had significantly fewer unique emotional responses. The conclusions for this study included the possible usefulness of the EPT with some specific groups of people but that further research was needed.

## INTRODUCTION

One of the most controversial problems in psychology since Eysenck (1952, 1960) is the effectiveness of psychotherapy. This problem squarely hinges on change and its measurement. There are many approaches to these complex problems but this study will focus on the Emotional Projection Test or EPT as an instrument to measure affective qualities of different psychiatric populations and change in group psychotherapy. This projective facial expression test is a uniquely swift and potentially powerful method of assessing the affective interpersonality dimension. The EPT was specifically designed and researched to make the commonly ignored connection between projected fantasies and behavior (Glad, D., 1956). The EPT also has a smaller focus than many other projectives which allows a closer examination of affective qualities of patients before and after therapy.

Change in psychotherapy is complex and multivariate occurring partially as a function of therapist and patient variable interaction (Glad, D., 1959). The basis for interaction includes more than demographic variables such as age, sex, social class and religion (Luborsky, Chandler, Auerbach, Cohen, and Bachrach, 1971) but involves "people characteristics" such as those tapped by the EPT. These affective "people characteristics" are core personality qualities that are often neglected or overlooked in examining patients. The EPT provides a focusing on these affective aspects for a more precise examination of the part they play in therapy.

In this study, three aspects related to psychotherapy will be examined. First, the usefulness and effectiveness of the EPT as a tool for measuring affective change in psychotherapy will be explored.

This first portion of the research examines the hypothesis that affective change in different therapy groups will be greater for patients matched correctly to appropriate groups as described by (Glad, D., 1959) than those patients matched to incorrect groups. Correct patient treatment interaction should produce more differential change according to the specified treatment orientation. Incorrect placement should produce less change in the direction orientation and even possibly a regressive change. The EPT will be used to focus on the affective changes in these groups. Specific hypotheses will also be tested on the direction of change for specific personality types in specific groups.

The second portion of the study examines the potential of the EPT in differentiating pre-therapy "pure type" personality profiles obtained by the Overall & Klett procedure (Overall & Klett, 1972). The EPT will be used to separate personality profiles independently obtained by using the Thematic Apperception Test (TAT) and Interpersonal Check List (ICL). Specific hypotheses were made as to the EPT scoring outcome. The advantage of a simple, reliable screening device to place patients into appropriate treatment conditions is evident. Since emotional aspects tapped by facial expressions have rarely been examined in differentiating

personality profiles, this portion of the study travels on new ground. This potential identification of personality profiles would aid in placement in the appropriate therapy modality.

Finally, the third portion of this study attempts to differentiate affective qualities of alcoholic from non-alcoholics. This is similar to the previous section in that the EPT will be used as an instrument to differentiate the two personality groups. The assumption being that affectively, the alcoholic personality differs from those that do not drink excessively. Specific hypotheses will be made as to what the alcoholic will look like on the EPT.

#### A REVIEW OF THE EMOTIONAL PROJECTION TEST

The EPT consists of a set of 30, 2 x 3 inch photographs of facial expressions. Fifteen plates are male and fifteen are female. The examinee is asked to tell what emotion or feeling is being expressed in each picture. Fifteen seconds per picture is ample exposure time requiring about fifteen minutes for the entire series.

The test plates were developed by Clader & Paxton (1949) under the direction of Glad after preliminary investigations by Feleky (1914) proved fruitful. The plates were developed by taking moving pictures of two student actors reading passages from Shakespearean plays. From 1500 pictures, 116 were chosen as representative. These 116 pictures were

shown to introductory psychology students who were asked to make judgments of the feelings represented. From the student selection, fifteen male and female pictures were chosen to be representative of 41 broad categories of responses obtained. No effort was made to correlate the emotion called for in the passage and those judged by the students. The thirty card selection was strictly empirically selected.

During the collection of the normative data, common responses for each picture accounted for fourteen to eighty percent of all reactions. The variability indicates personal idiosyncrasies in picture perceptions. The "projective" process appears to be involved in accounting for some of the unique individual responses. The normative data responses are comparable to the popular response on the Rorshach and common thema categories of the Thematic Apperception Test (TAT).

The variety of vocabulary used to describe "feelings" indicated the need for a system to categorize responses. Responses were more than just feelings but included expressive behaviors, social interactions, as well as feelings. For example, "crying" and "sadness" would be a response to the same card but are structurally different. "Crying" is an expressive behavior or action while "sadness" is a feeling. In examining the normative data, less than half of the responses for the test as a whole were given in terms of "feelings" as requested by the instructions (Glad & Shearn, 1956). The remainder of the responses for the test were shown to have

expressive behavior qualities like "smirking," some interpersonal reference "Looks like she is upset at someone" or an intellectual quality like "thinking." These structural differences were found later to be significant in differentiating certain types of groups of people. (Harris, 1949; Thaler, Weiner & Reiser, 1957.)

Harris (1949) compared individual EPT plates of twenty-eight diagnosed paranoid schizophrenics and fourteen reactive (neurotic) depressives with those of the normal sample tested by Clader & Paston (1949). His content analysis revealed that depressives as a group sharply differed from the normal group. An example of this difference can be viewed on a card that normals would respond to with sadness or sorrow. The depressives were apt to give something like happiness or anger responses. His conclusions noted that the test differentiated the paranoid schizophrenics from the normals and from the reactive depressives but did not differentiate the reactive depressives from the normal group. He observed that schizophrenics tended to give responses of activity rather than those which were affective or situational.

The data provided by Harris (1949) was later reanalyzed by Glad (1949). He estimated the trends of the test as a whole instead of comparing the different subject-group responses to each separate picture. In general, Glad found that depressed subjects gave proportionally more purely affective responses than the other groups. The schizophrenic group tended to give non-affective responses. The most

outstanding single difference was that depressives gave a much larger number of responses associated with hostility or disapproval than either of the other two groups. Glad (1949) states that cautious interpretations may be made in terms of the dynamics involved. The interpretations refer to the tendency of schizophrenics to give nonaffective responses (thinking) which is consistent with the reduction of affect with this group. Similarly, the exaggerated portion of hostility responses on the part of the depressives is understandable in terms of the central importance of the struggle to control intense aggressive urges.

Camp (1950) subjected the Rorschach, TAT, and EPT to factor analysis and found significant EPT loadings in seven of eight factors isolated. He improved on Clader & Paxton's method of analysis, categorizing the responses into six types.

1. Non-affective
2. Wondering--thinking
3. Happy--self-enhancing
4. Self-deprecation
5. Hostility, disapproval, superiority, disbelief
6. Surprise

An examination of the factor loadings led to the following tentative conclusions concerning the significance of the responses given by the schizophrenics employed in Camp's study:

1. Wondering--thinking responses reflect a schizoid affective withdrawal.



2. Self-deprecation responses relate to overcontrol of emotions.
3. Surprise responses relate to the mechanism of denial.
4. Hostility responses are the counterpart of anxiety.
5. Happy responses are related to social and fantasy satisfactions.

Page (1951) made use of Camp's scoring procedure in demonstrating changes during the course of cortisone therapy. Page's use of the EPT in this setting marked the first employment of the EPT as a tool for measuring change in therapy.

Chandler & Zanger (1952) used the EPT along with the Rorshach in a study of the personality changes produced experimentally by the administration of Lysergic acid or LSD. The drug was given to thirty hospital patients with thirteen diagnostic types of pathology to see if psychotic manifestations were intensified by the Lysergic acid. The EPT was used to specifically look at affective changes. An innovation in this study was the scoring of the EPT and behavior by the (Glad & Glad's 1963) interpersonality synopsis model and notational system.

Smith & Woodward (1952) applied the EPT to an investigation of the relationships between projective fantasies and overt behavioral reactions. Six college students were interviewed individually, each under three expressive variable conditions defined as unfriendly, neutral, and friendly. EPT responses were secured immediately before and immediately following each interview. The EPT responses and subjects'

overt behavior during the interview were both classified by applying Glads' system. It was then possible to compare the changes of overt behavior with changes in EPT responses in pre-post administrations of the test. Smith & Woodward (1952) also found that frequent administrations of the EPT during the sessions did not seem to be affected by learning or practice. More importantly, Smith & Woodward were the first to utilize more than two serially administered EPT's in order to measure change. The findings also indicated a more complex perceptual process is involved in projection of fantasies.

Thompson (1952) in a study similar to Smith & Woodward's, compared social behavior codings and EPT responses of six schizophrenic patients accumulated during six weeks of psychotherapy. This was the first study in which attention was given to the types of psychological processes related to various EPT responses. By comparing EPT responses obtained during early and late therapy with social behavior codings at the same time, Thompson was able to arrive at certain inferences about the type of projection which led to the responses in various instances. Thompson found six kinds of projection including:

1. Perceptions of the self.
2. Desires about the self.
3. Disowning projections.
4. Assimilative projection.

5. Desires about the non-self.

6. Reciprocal Projection.

The major contribution of this study was the distinction between those EPT responses that involved descriptions of the self and those that involved descriptions of the non-self. Considerations were given to other factors such as the sex of the subject and the sex of the figure in the plate and the response given. Overall, this study indicated that the EPT is an effective device for measuring change during psychotherapy.

Roberts (1953) employed a similar procedure to that used by Thompson. The data analyzed consisted of social behavior codings and EPT responses collected during ten psychotherapy sessions. With two subjects considered to have schizoid personalities, Roberts found the EPT adaptable and useful in measuring change in psychotherapy.

Shearn (1954) used a multiple choice format of the EPT as a method to study four types of apperception defined by Cattell (1951). The EPT was administered on two occasions, a week apart, to seventyeight experimental and thirtyseven control subjects who were business college students. Just prior to the second testing session, the experimental subjects were exposed to a frustrating situation not shared by the controls. Information on the emotional condition of each subject at the time of each testing was obtained through self-ratings of feelings. Changes in subjects' ratings of their own feelings were compared with changes in the EPT responses. One of the major findings was that subjects who

reacted aggressively to the experimental frustration tended to have higher scores on all types of apperceptions. This indicated that these subjects allowed their feelings to influence their perceptions to a greater extent than did less aggressive subjects. Again, this study showed the usefulness in utilizing the EPT in examining change.

Many of the previous studies have examined the EPT as a tool for looking at the perceptual processes as well as its effectiveness in detecting change. The focus of this study is not on the type of apperception but rather the usefulness of the tool in detecting change in psychotherapy. Other studies that support the usefulness of the EPT in the measurement of changes include Jeffers (1955) and Miller, Hayne, Thompson, & Glad (1956).

The EPT has also been successful in several attempts to differentiate different populations of people (Hayne, 1950; Thaler, Weiner, and Reiser, 1957). Such a process would be helpful in isolating different affective personality characteristics that could be matched with different therapy groups (Glad, D., 1959).

A brief review of the EPT shows that it is a potentially useful tool because of its brevity, concentrated focus, and adaptability in looking at projective processes. There is no small amount of data on projective testing but there is a lessened emphasis on the projective processes involved. More specifically the EPT can be viewed as directly connected to the behavior of the participant. This behavior-fantasy

connection is often ignored in research. Perhaps the most important findings in relation to this study are the usefulness of the EPT in measuring change in therapy and in showing differences in two clinical groups. These last two findings are the most relevant in terms of this study.

#### OUTCOME IN PSYCHOTHERAPY

In this section we will look at change in psychotherapy with a greater emphasis on group treatment. The following research supports the hypothesis that change in psychotherapy is not unidimensional. Change in psychotherapy occurs jointly as a function of interaction of therapist technique and patient variables (Glad, D., 1959). Let us examine some of the studies concerning patient-therapist variables and their interaction.

In Eysenck's (1952, 1960) controversial series of articles, he concluded that psychotherapy has not been demonstrated to affect improvement as compared to no therapy. Since then there has been much research and controversy over the issue. A point that is becoming increasingly clear is that the lumping together of different types of patients and kinds of therapy obscures changes. Different schools have different goals, therefore different orientation appear to succeed with different patients.

Betz (1963) has differentiated two therapist styles on the Strong Vocational Interest Scale. Type A therapists

(a social problem-solving managerial type) work best with schizophrenics. Type B therapists (a precision science-oriented type) work best with neurotics. Rosenthal and Frank (1958) also concluded that particular forms of psychotherapy may be more effective with certain kinds of patients. Some patients may not respond at all to one therapist but respond very well to another (Wolff, 1954).

Noy (1969) compared three types of psychotherapy in an investigation. The basic assumption was that treatment judged appropriate on theoretical grounds would be more effective than other treatments. He compared client centered therapy, psychoanalytic therapy, and "intervention" therapy. Intervention therapy was defined as therapy judged as most appropriate. The "intervention" therapy was found to be significantly better than the other two, neither of which differed significantly from the group receiving no treatment. Noy concluded that the factor which contributed most to positive outcome was interaction between a given diagnosis and its appropriate therapy treatment.

Noy's study supports the work of Glad (1959). Glad reports a group of exploratory studies which lead to the conclusion that certain clients are more likely to respond positively to one therapeutic system and others to other systems. Characteristic reactions can be reliably shown where particular types of individuals are exposed to particular treatment approaches. Smith and Glad (1956), Bourestrom & Smith (1954), and Glad, Smith and Glad (1957) compared

reactions of college students exposed to a dynamic relationship method of group leadership with those receiving an interpersonal method. Findings derived from analysis of behavioral observations revealed clear differences in patterns of reaction to these two methods. Glad, Lewis, Page, and Jeffers (1953), found that more positive perceptions of others and more friendly social behavior resulted from the interpersonal leadership. Harris (1955) who studied individual interviews with normal subjects supported the above findings. He also found that these subjects reacted to a dynamic relationship approach with dependent behavior.

The hypothesis of differential responding to distinctive methods has been studied in relation to schizophrenic patients by Ferguson (1956), Hayne (1958), and Glad, Hayne, Ferguson and Glad (1963). They studied the effects of three treatment orientations including client centered, dynamic relationship, and interpersonal on various types of schizophrenic patients. The most "regressed" patients improved most with dynamic relationship therapy which emphasized their feelings toward others. The most mature patients became better socialized when exposed to techniques derived from interpersonal psychiatry. The client centered approach had little measurable effect except to increase individuality.

Glad and Glad have conducted a ten year program of systematic application of four different treatment orientations (see Chapter Three in Epps, Barnes, McPartland, 1965). Each type of treatment was used with the specific patient population

to which it was judged, on theoretical and empirical grounds, to be most appropriate as described by Glad (1959) and by V. Glad in Epps, et al. (1965). The orientations include:

1. The psychoanalytically oriented Expressive Interpretive (EI) group consisted of patients whose behavior indicated they were non-psychotic, neurotic or character disorders with reasonable ego strength. Psychodynamic exploration was used to encourage resolution of transference problems and develop self-understanding. As the result of clinical experience it appeared that a period of at least fifty-two weeks was required to achieve more appropriate self-management.

2. The Social Management (SM) interpersonal groups consisted of patients whose behavior was hostile, disruptive, belligerent, paranoid, and aggressive. Therapy emphasized bringing about cognitive awareness of aggressive interaction and development of appropriate interpersonal management and skill. The therapist's role was to operationally apply role aspects of Sullivanian Interpersonal Theory in aiding patients to achieve more effective social skills.

3. The Rankian Emotional-Relationship (ER) groups were comprised of people who were withdrawn, shy, timid, inhibited, unresponsive and apathetic. They were behaviorally non-aggressive and immobilized by fears of destroying themselves and others. They tended not to experience much of the satisfaction of living. The therapist's role and operations were in verbalizing the unexpressed feelings members of the group



experienced with each other. Other therapist roles include assisting the patients to experience and develop the ability to handle fears of hostility, separation, dependency, and closeness.

4. The Social Emotional (SE) or existential-phenomenological decision making group was a heterogeneous mixture of patients. Those left over from other assignments were placed here. The therapy emphasizes interpersonal feedback, self-acceptance, and the making of constructive decisions.

These basic groups provided the core for treatment at a mid-western mental health center for Glad and Glad's ten year study. In the center, out-patient clients began by participating in the Treatment Preparation Group (TPG) for no more than six sessions. In the TPG, patients were acquainted with general arrangements for therapy, given information about available services which aided therapist in deciding on their therapy assignments (see Figure 1). Associated with referral to the TPG was the administration of a battery of tests including: Thematic Apperception Test (TAT), Interpersonal Check List (ICL), Draw A Person Test (DAP) and the Emotional Projection Test (EPT). On the basis of clinical judgments, two clinicians managing the TPG decided on patient assignments to one of the group treatments described above. The treatment groups met once every week for six months with the exception of the EI group which required twelve months.

In a preliminary attempt to evaluate the effects of these patient-treatment combinations, Calhoun, Chernets,

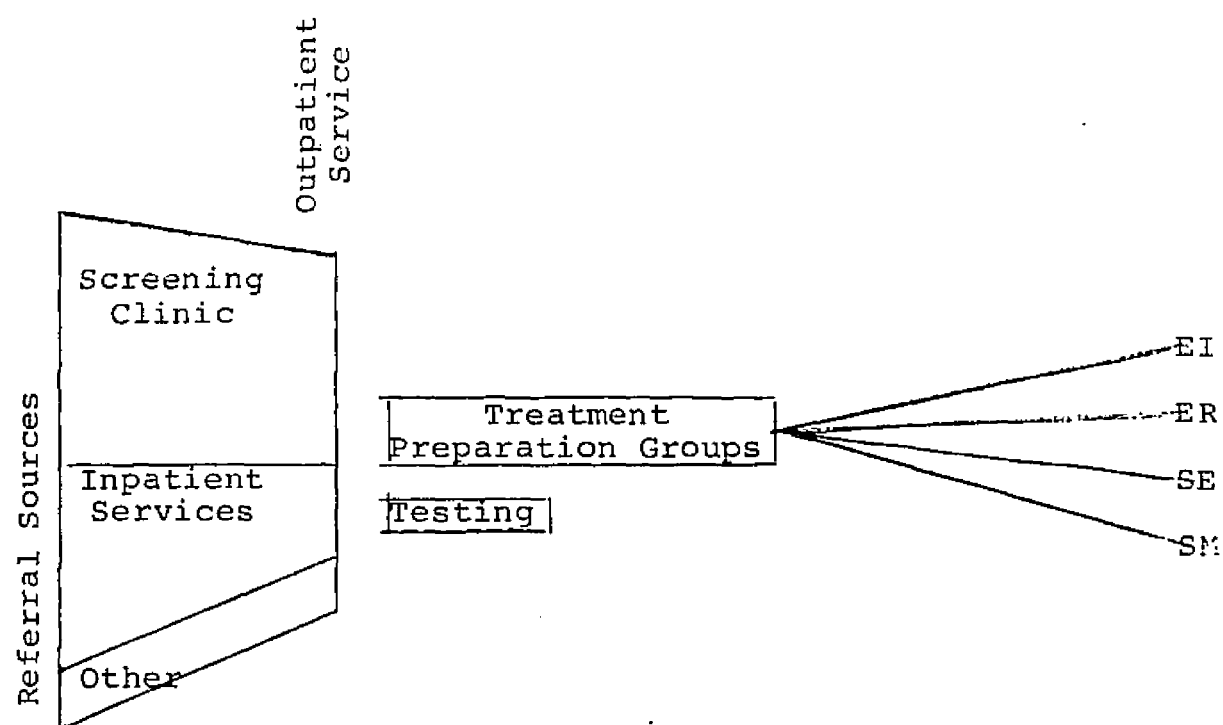


Figure 1. Schematic of Procedures at Midwestern Clinic.

Sellers, Glad and Glad (1970), used pre- and post-therapy TAT protocols to measure change. The results confirm those of Glad, et al. (1953) by demonstrating that aggressive paranoid individuals when treated by Social Management techniques, appeared to become less disruptive, belligerent, and impulsive. The effects also showed that the Social Management group became more tolerant of feelings and actions of others. They also found that withdrawn and apathetic patients when exposed to emotional relationship (ER) therapy, gave up some of their rigid control and began to express their feelings more openly and freely. The EI therapy group characterized by neurotic and character disordered patients became more independent and less passive. There was no clear-cut changes in the SE treatment group. Using Glad & Glad's data bank, other similarly related studies followed.

Calhoun (1971) conducted a study using data from the Glads' bank at a midwestern mental health center. Her primary focus was on the interaction of four types of patients with four treatment groups as described previously by V. Glad in Epps, et al. (1963). Ten subjects for each of the four treatment groups were selected and their protocols examined. Pre- and post-therapy TAT and ICL protocols were compared for each subject and a change score obtained. Individual scores were derived from judged ratings of change on thirteen TAT categories suggested on theoretical and empirical grounds as being important in therapeutic change (Calhoun, et al., (1970). Scores were subjected to both inverse and obverse factor

analysis. The obverse factor analysis results were ten factors describing areas of self, attitudes toward and identification with parents and spouse, and therapeutic improvement. From the inverse analysis, ten factor clusters were obtained. A significant finding was that subjects did not cluster along lines of group membership with sex and age being more important variables.

In addition to the inverse factor analysis, a coefficient of profile similarity (Cattell 1949) was calculated. The resulting  $r_p$  matrix was subjected to a cluster analysis which yielded four clusters of subjects. The results of this analysis resembled the factor clusters of the inverse factor analysis. It provided combinations of the inverse factor clusters thus showing groups that (1) had positive feeling toward mother and spouse; (2) had negative perceptions toward mother and spouse; (3) perceived socially valued ideas as important; and (4) failed to show improvement as measured by the TAT and failed to change in terms of ideal self.

Chernets (1972) conducted research using data again from Glad and Glad's data bank in which he examined personality characteristics of 167 out-patients at a midwestern mental health center. The individuals were assigned to one of the four therapy groups described by V. Glad in Epps, et al. (1965) as reviewed previously. They were further divided into groups classified as rejectors, retreaters, withdrawers, walkouts, self-terminators and finishers. The groups are described on the following page:

1. Rejectors (RJ). These patients completed group testing but did not participate in the TPG. They did not return for any services after testing.

2. Retreaters (RT). Patients in this group took the battery of tests and appeared one or more times in the TPG. No definite treatment assignment was made.

3. Withdrawers (WD). Patients were tested, attended TPG and were assigned to a therapy group. They did not show up for their treatment assignments.

4. Walkouts (WO). Patients were tested, completed TPG, given final treatment assignments, and attended at least six sessions of their therapy group.

5. Self-Terminators (ST). Patients were tested, completed TPG, and participated in their assignment groups. However, they initiated withdrawal before Tx officially ended.

6. Finishers (FI). Patients were tested, completed TPG assigned to a group and successfully completed treatment testing.

Personality measures for the subjects were obtained from the ICL and TAT. The test data were subjected to multivariate and univariate analyses. An inverse factor analysis was obtained but an extensive examination was not made of this data. The results substantiated the belief that individuals selected for particular group styles on the basis of behavior and clinical judgment do profit from these inter-personality congruent therapy groups.

Avery (1974) continued the study of the intercongruence model with Glad and Glad's data bank. She utilized the same patients' protocols used by Chernets. Using TAT and ICL data, Avery made a more extensive examination by factor analysis using a Taxon Method of hierarchical cluster analysis with forty subjects. The eight resulting clusters contained twenty-eight of the forty subjects. It was determined that the patients did not cluster simply according to group treatment assignments or time involved in therapy. They clustered complexly along lines of sex in combination with the treatment assignments and the time in treatment. Psychodynamic interpretations on the basis of the relationships of time of termination, therapy group, and sex of the patient yielded the greatest amount of information. It was found that patients did cluster according to psychosexual development stages and personalities resulting from psychosexual fixation. Avery concluded that the data were promising but inconclusive and further work was needed.

In response to this need Avery (1976) used the entire 167 subjects selected by Chernets (1972) to present a further examination. Each subject was assigned to one of the four therapy groups in Glad and Glad's data from a midwestern mental health center. Each individual was also classified according to treatment termination time as rejector, retreator, withdrawer, walkout, self-terminator, or finisher. Personality measures were obtained from the ICL and TAT. Test data were subjected to Linear Typal analysis (Overall & Klett, 1972). Overall & Klett's procedure is designed to yield clusters of

variables describing a "pure type profile" of personality. The data revealed five pure profiles clustering according to psychodynamics with contributing effects from variables including theoretical group method, termination time and sex. An important finding was the five "pure type" profiles including:

1. The psychoanalytically oriented (EI) profile. In this group, the opposite sexed parent is experienced as loving where the same sex is seen as controlling. Self-description of members in this profile include dependent, generous, cooperative and self-punishing qualities. TAT characteristics include relative ego strength, self-acceptance, optimism, and expressiveness.

2. The Social Management profile (SM) has two related clusters which shall be identified as SM I and SM II.

SM I can be characterized as aggressive righteous paranoidal people. These individuals describe themselves as self-directed, responsible normal people. They want to be like the opposite sex parent but behave like the dominant, aggressive same sexed parent. TAT data suggest a low degree of reality orientation. This profile has proportionally more males than chance expectancy.

SM II can be characterized as bitter, persecutory, paranoidal people who were the most likely to reject or walk out of treatment. They describe themselves as complaining, resentful and bitter. They tend to be aggressive and resistant to outside influences. Mothers of women in this group

were seen as forceful and managing. There seems to be some identification with the aggressive mother in these women.

3. The Emotional Relationship (ER) profile people described themselves as distrustful, sceptical, self-effacing and modest. Their mothers are described as self-assured and indulgent, people who enjoy caring for others. Fathers are not differentiated from mothers. In the TAT these people are scored as expressing intense resentment and showing inhibited action.

4. The Social Emotional (SE) profile people describe themselves as bitter, wanting to be more secure and self-assured, with hostility toward at least one parent. In the TAT these people are scored as relatively self-responsible, self-accepting, and optimistic with healthy decision processes.

Avery's study is an important pivotal contribution to the series of research projects completed concerning the patient-treatment interaction. Avery supports the hypothesis that patient-therapist interaction is of primary importance in selection of treatment type. With these pure profiles available, a research design could be produced using the "pure types" as an experimental group with the appropriate group placements. These correctly placed "pure profiles" could be compared to other placements of pure profiles placed into other groups. The data provides an opportunity for a potentially powerful design comparing change in group therapy as well as correct placement in those groups.



## PROJECTIVE TESTING WITH ALCOHOLICS

Looking at affective qualities of alcoholics expands the focus of use for the EPT from simply measuring affective changes in therapy to using those same affective qualities to differentiate personality profiles before therapy. Potentially this would be an aid to correct therapy group placement. For example, alcoholic profiles may be differentiated for possible future treatment disposition. The utility of a brief projective screening instrument for detection and placement into different therapy can be clearly seen. The choice of the therapeutic modality for an alcoholic may imply a marked difference in therapeutic approach than for a schizophrenic. So, in part, treatment assumes adequate knowledge of the individuals dynamics for a choice of treatment. In this context, personality styles, pre-therapy and changes in therapy are included to extend this research project.

The reason for choosing the alcoholic group to be differentiated from non-alcoholic is two fold. First, projective research on alcoholic groups has been equivocal. Most psychological test data are ineffective in separating alcoholics as a group from non-alcoholics. Also, these approaches are usually time consuming and cumbersome. Based on previous research using the EPT to differentiate groups (Hayne, 1950; Thaler, Weiner and Reiser, 1957), the EPT by contrast is potentially a brief, effective measure. The second reason for choosing this additional area of research is to provide first

hand experience in using the EPT to separating different groups of people. The following review will concordantly focus upon projective psychological testing with alcoholics and previous use of the EPT to separate different groups of people.

With the development of the first projective personality test in the 1920's, their popularity increased as a measuring instrument. Their advantage was considered to be the global and multidimensional measurement of personality. Many of the psychometric tests of that day yielded only a test score related to a single dimension of personality. Another stated advantage of projective tests was that fabrication and response sets were severely curtailed. It was more difficult for the examinee to figure out what the "correct" response was because of the increased ambiguity. It was also thought that the projective techniques tapped deeper levels of the personality. But these same virtues were and continue to be marked with problems. Interpretations are difficult because of the great variability between examiners. This lack of stable and valid interpretation increases the intuitive inferential process. Although the responses to projectives are more relevant to personality than some other psychometric devices, there must be a balance with the lack of interpretive precision. The same difficulties plague attempts to use projective test with alcoholics.

The Rorshach inkblot test was used extensively in the identification and diagnosis of alcoholism during the years from 1940-1960. Since that time the Rorschach's use with alcoholics has diminished. Influenced by psychoanalytic

theory, diagnosticians linked orality to alcoholism. Shafer (1948) showed that alcoholics could be diagnosed by their excessive use of food, eating, and mouth content on the Rorshach. Klopfer and Spiegelman (1956) claimed that shading responses were ignored by alcoholics. But Klopfer & Kelly (1942) raised doubts about using the Rorshach for diagnosing alcoholism. On the basis of clinical experience it was felt that general alcoholics show no typical Rorshach patterns and empirical studies tend to support this (Goldstein & Neuringer, 1976). However, conclusions about the alcoholic personality have shown positive results even though some characteristics are resistant to cross validation. Goldstein & Neuringer (1976) include nine characteristics of alcoholics from Rorshach studies:

- (1) Alcoholics are more psychopathic than neurotic.
- (2) They show an incapacity to tolerate stress.
- (3) They lack perseverance to overcome difficulties.
- (4) They are grandiose in their plans but do not have the patience or concentration to reach their goals.
- (5) Alcoholics have a high level of guilt and anxiety than do psychopaths but less than do neurotics.
- (6) They are egocentric and lack emotional depth and warmth.
- (7) Alcoholics have poor interpersonal relationships.
- (8) They tend to be constricted, think in stereotypes and are pedantic.
- (9) Alcoholics use regression as their major defense mechanism.

The next most utilized projective test in determining alcoholism is the Thematic Apperception Test (TAT). Klebanoff (1947) looked at fantasy levels of 17 alcoholic patients. He found a great deal of emotional tension related to their drinking and that frustrations led to passive withdrawal responses. Roe (1946) however, reported no basic differences between alcoholic and non alcoholic TAT responses. Other studies also support negative findings (Knehr, Vickey, and Guy, 1953; Singer, 1950). Others found that alcoholics were less flexible and adaptable in the face of stress (Fisher & Fisher, 1955). Since there has not been many studies using the TAT with alcoholics, it may be premature in concluding its effectiveness. However, the general indications of the use of TAT with alcoholics is at best equivocal.

The Bender-Gestalt is primarily used to assess psychomotor qualities of brain damage but has been used as a projective test device with alcoholics. Curnutt (1953) claimed to have found twenty differences between Bender-Gestalt drawings of alcoholics and non-alcoholics. Farmer (1973) used the Bender to evaluate changes during periods of abstinence from alcohol. However, findings have not been able to clearly differentiate between personality related drawings from brain dysfunction drawings that are a consequence of alcohol.

The last two tests reviewed include the Rosenzweig Picture-Frustration Test (P-F) and the Word-Association Test. The P-F was specifically developed to assess reactions to

frustration. Since other studies suggest that alcoholics have difficulty with frustrations, Brown & Lacey (1954) gave the P-F to alcoholics, paranoid schizophrenics, and normals. No useful differential responses could be found. Schafer (1948) in looking at the Word-Association Test, suggested that alcoholics would show conspicuous disturbances in reaction to words with oral connotations. No research is available to support or disprove this hypothesis.

In brief, projective techniques have shown some promise in detecting alcoholism. For the most part, though, the studies are mixed at best which is indicative of a need for further research on available and newer projective methods. The use of a facial expression test with alcoholics such as the EPT, is not available in the literature and may possibly be an answer to newer and better methods in detecting alcoholism. Although there are no known studies using facial expression tests to differentiate alcoholics from non-alcoholics, the EPT has been successfully used to differentiate personality characteristics of different groups of people.

In Hayne (1950), personality characteristics of delinquent boys have been differentiated from those of non-delinquent boys. Forty delinquent boys committed to an industrial school were compared to forty matched normals in a public school system. Matching was made according to age, school grades, and socioeconomic level. The results showed no significant difference in feelings in general, in expressive behaviors, or in interactions. Differences between the groups

showed that the delinquents gave more positive or pleasant feeling responses than the non-delinquent group. The delinquent group also gave significantly fewer hostile responses. Finally, the non-delinquent group reacted significantly faster to female plates than the delinquent group. There was no significant reaction time difference between the groups on the male cards. The last difference was that delinquents rejected more cards than did the non-delinquent group. These results indicate a possible delineation of group population by the use of the EPT.

In another significant study, Thaler, Weiner, and Reiser (1957) used the EPT to differentiate between groups with "psychosomatic" illnesses including peptic ulcer, hypertension, gastrointestinal illnesses, cardiovascular illnesses, and patients facing elective thoracic surgery. Seventy-five patients were divided into five equally matched groups. Five EPT categories were obtained a priori as relating to these problems and used. Three out of five of these categories differentiated between the groups almost perfectly. In the interactional category (happy because she sees a friend) six or greater responses differentiated the ulcer and surgery groups from the other three. Fourteen of fifteen hypertensives gave less than six responses using feelings or emotions and tended to use actional thinking responses as compared to the other four groups. Finally, twelve of sixteen hypertensives gave six or greater responses using overt hostility (cursing, sneering) as compared to the other four groups. Possibly

the most outstanding finding is the clear differentiation between these different types of psychosomatic disorders.

These two studies support the use of the EPT as a potentially useful tool in differentiating groups of people. The EPT additionally is useful because of its brevity of administration (approximately 15 minutes), concentrated focus on affective qualities, and adaptability in examining the projective process. In this light, use of the EPT with alcoholics looks promising.

#### STATEMENT OF PROBLEM

With the previous research as a background, the first portion of this study hypothesizes that changes for patients in different therapy groups will be greater for those patients matched correctly to the appropriate group as described in Glad (1959). Correct patient treatment interactions should produce more differential change according to the specific treatment orientation. Incorrect placement should produce less change in the direction of the orientation and even possibly a regressive change. Using the Linear Typal Analysis of "pure type" profiles as criteria for true theoretical group treatment belonging, a direct comparison can be made with other "pure types" not placed in the most appropriate group. For example, aggressive patients in the SM therapy can be compared to aggressive patients in the SE therapy.

The EPT will be used as the instrument to measure change in the different groups. The usefulness of the EPT to measure the emotional components of the interpersonality variables of the patients will also be a focus in this study. The EPT is a potentially powerful and concise tool in measuring a focused aspect of the patient-treatment interaction. Using the Interpersonality Synopsis scoring system, the EPT will be the basis for examining therapy changes as a validation of this facial expression projective device.

Before proceeding, an attempt will be made to predict changes and characteristics of pure type profiles using the EPT. The most substantiated previous finding concerns the SM and ER groups. The SM group tends to produce actional responses rather than feeling responses. The tone of their responses are more neutral (thinking, looking) rather than tensional (anxious, tense, angry, hostile). Changes for this group are in the direction of more feeling components. The tensional aspects tend to move from neutral to tensional qualities. The pure SM profile should have more actional and neutral responses before therapy and more feeling and tensional responses at the completion. It is hypothesized that changes in this direction will be greater when pure SM profiles are placed in the SM group than when placed in other groups.

The ER group is almost the converse of the SM group. These individuals tend to have more feeling responses than actional ones. The tone of the responses tends to be



tensional rather than neutral or relaxed. With correct placement in treatment, the ER group tends to move toward more actional responses and the tone tends to be more relaxed. It is hypothesized that the "pure type" ER placed in the ER will have more actional and relaxed responses compared to "pure type" ER placed in other groups.

The predictions for the other two groups are not made with as much confidence as the two previous groups. The EI group is not directly comparable to the other groups because of its increased length (fifty weeks). The SE group tends to be more general in approach where aspects of all the other groups are combined. Patients not fitting into the other groups are placed in the SE group. With both groups it is expected that the tonus qualities of the responses are probably tensional and move toward neutral and relaxed at treatment completion. Also the SE group will probably show more structuring, decision-making responses at completion of therapy.

The purpose of this section is to test the hypotheses about each of the pure profile sets in relation to appropriate group placement as contrasted to inappropriate group placement. The results of this testing should verify whether or not personality profiles differentially change as a function of specific treatment orientations. On this basis, the EPT may be used to develop a set of predictions in which treatment assignments can be made for particular sets of pure profile people. This leads to the second portion of this study.

The second part of this study examines the EPT's potential in differentiating "pure profiles" prior to the treatment orientation. The hypotheses made are concordant with the previous sections description of the SM and ER personality profiles prior to treatment. It will be hypothesized that the SM "pure profile" prior to therapy will have more actional responses than feeling responses. The tone of their responses should also be more neutral (thinking, looking) rather than tensional (anxious, tense, angry, hostile). The ER pre-therapy profile should be the converse of the SM group. They should have more feeling responses than actional ones. The tone of the responses should be more tensional rather than neutral or relaxed. The potential advantage of a simple, reliable screening device to place patients into appropriate treatment conditions is evident.

The purpose of this final portion of the research design is to examine the EPT as an instrument to differentiate alcoholics from non-alcoholics. As previously reviewed, the EPT has been successful in differentiating delinquent from non-delinquent boys and differentiating types of psychosomatic illnesses while making specific hypotheses about the EPT response for different groups. Similarly, specific hypotheses will be made about the alcoholic group based on previous research and theoretical dynamics of the alcoholic. The basic theoretical premise is that alcoholics will have more difficulty identifying, labeling, and verbalizing affective responses on the EPT.

## METHOD

### Subjects

Subjects for the first and second portions of this study were a highly selected sample from Glad & Glad's data bank of 2000 patients. The subjects were selected by several criteria: First, they were all Finishers of therapy and had pre- and post-EPT scores. Second, all the subjects were subjected to Overall & Klett's Linear Typal Analysis to yield patients of "pure type profiles." This analysis will provide enough patients with "pure type profiles" for each of the treatment group comparisons as seen in Table 1. This table shows the number of subjects in each group and each "pure profile". The number of subjects in each treatment group includes 30 for the SE group, 12 for SM, 11 for EI and 13 for the ER group. The small sample size in some groups is supported by the fact that these are "pure type" subjects rather than a purely random selection. Realistically, however, the subjects selected represent all the available cases in Glad & Glad's data bank. Both the EI and SM groups were exhausted. Overall, there were 66 subjects used.

The alcoholic subjects for the third portion of this study were hospitalized at Wright-Patterson Air Force Base Medical Center for abuse of alcohol. All the subjects were hospitalized inpatients in an alcohol rehabilitation program at the time of testing. They were tested within the first week of hospitalization and were

TABLE 1

NUMBER OF SUBJECTS IN DIFFERENT THERAPY GROUPS WITH DIFFERING  
PURE PROFILES

Treatment Group	Pure Profile					
	1	2	3	4	5	TOTALS
SE	4	7	8	7	4	30
SM	1	3	2	4	2	12
EI	1	5	2	1	2	11
ER	2	1	3	2	5	13
TOTAL	8	16	15	14	13	66

detoxified as necessary. The subjects were usually placed on a separate ward designed and programed for alcoholics. The subjects were military members. Their ages will range from 20 to 55 with both male and female patients. All the hospitalized subjects were screened by the Medical Center as the most severe abusers of alcohol. By the time these individuals reach the hospital, most had administrative actions taken against them because of their drinking. The most outstanding characteristics of these hospitalized subjects was a marked disruption in their lives because of persistent drinking. Thirty eight inpatient alcoholics were used for this study.

The control group for this study consists of individuals attending a nearby college in the area. The subjects consist of both male and female adults within the general age ranges of 20 to 55 years. The subjects were screened for excessive alcohol abuse by means of a brief questionnaire at the time of the testing procedure. Sixty-eight non-alcoholics were used for the control group.

### Procedure

The data from Glad & Glad's data bank supplied the subjects for the Linear Typal Analysis. Subjects used by Avery (1976) that were pure profile finishers were used in this study but further analysis will be required for additional subjects. Avery's scoring procedure was repeated using the ICL and TAT for the Linear Typal Analysis.

Scoring categories for the TAT developed by Glad & Calhoun (Calhoun, et al., 1970), can be seen in Table 2. Each of the ten TAT cards (1, 2, 3BM, 6GF, 6BM, 7GF, 12M, 13M, 17BM, 18GF) was scored as to the presence (1) or absence (0) of these categories.

The EPT was scored for both pre- and post-testing sessions using Glad's interpersonality synopsis model (see Table 3). Roosa (1951) has shown the reliability of this method in scoring both behavior and EPT responses.

#### Treatment of Subjects

The original patients at the midwestern mental health center were placed into four treatment groups differing in orientation (ER, EI, SM, SE) on the basis of clinical observations and judgments (Epps, et al., 1965). Selected patients were chosen from these therapy groups as described previously. All the subjects in this study were finishers as classed by Chernets (1972). "Pure type profiles" as classed by Avery (1976) were used as the basis for comparing EPT change scores. The three experimental groups consisted of "pure type profile" finishers placed in the concordant group. For example, the "pure type" SM subject placed in the SM group, the "pure type" ER placed in the ER group and so on. Each of the "correct" placement experimental groups was compared to two different control groups.

The first series of control groups can be described as "incorrect" therapy group placements in each of the four

TABLE 2

## CATEGORIES USED FOR SCORING TAT PROTOCOLS

Category	Definition
Self-acceptance	Acceptance of one's own emotions, capabilities, ideas, etc.
Passive	Physical inactivity, resignation, relaxation, compliance, dependency
Active	Movement, animation, energy, enthusiasm
Self-delineation	Differentiation of self from environment, independence, body image
Self-orientation	Self-concern, narcissism, introspection
Other orientation	Concern with others, interaction with others
Avoidance of feeling	Blandness, control, description rather than a story
Expression of feeling	Openness, honesty, lack of constriction
Sick decision process	Commitment to get sick or stay sick, avoidance of problem solution
Healthy decision process	Commitment to improvement, growth, development, purposeful planning
Self-responsibility	Accepting consequences of one's actions, and responsibility for one's role
Reality orientation	Objectivity, lack of bizarreness, means-ends relationship
Optimism-hopefulness	Cheerfulness, positive outlook

TABLE 3

## SCORING CATEGORIES FOR THE EPT

TONUS

~~~~~ TENSION--anxious, tense, bewildered, startled.  
 \_\_\_\_\_ NEUTRAL--questioning, thoughtful, just looking, uninvolved.  
 ~~~~~ RELAXED--happy, calm, relaxed, easygoing, confident.

## ORIENTATION

○ TOWARD--he is looking at somebody, looks like he is mad at somebody.

○ AWAY--she is indifferent, isn't feeling anything, he is looking away.

[illegible]

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+ POSITIVE--she is happy, looks friendly, relaxed.
0 NEUTRAL--he is looking, thinking, questioning.
- NEGATIVE--fighting, distress, angry, unpleasant.

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STATUS

   EQUAL--he is agreeing with somebody.  
0 ABOVE--sneering, acting superior.  
0 BELOW--crying, asking for help, acting like a baby.

CONTROL

S< he is controlling himself, he refused to have any feelings, self-control.

P1>P2 interpersonal control, he is telling other guy to shut up, forcing him to listen, acting like tyrant.

## STRUCTURE

STRUCTURE--he's trying to make sense out of it, he is  
getting his thoughts organized, he's giving  
somebody else the picture.

## INCLUSION

C INCLUSION--he wants to join the gang, he doesn't like being left out, he wants to get in on the discussion.



therapy assignments. This includes all subjects placed in a treatment group having something other than the "pure type profiles" concordant with that therapy group. For example, the control for the SM experimental group was other "pure profile" finishers, in the SM therapy group. For the ER experimental group, the control group included other "pure profile" patients in the ER therapy group.

The second series of control groups included only "pure profile" finishers placed in the SE therapy group. These groups consisted of pure profile patients misplaced in the SE group. This misplaced assignment allowed a comparison between "pure profiles" placed correctly in their concordant groups with the same "pure profiles" misplaced in the SE group. For example, the SM "pure profile" in the SM therapy group was compared to the SM "pure profile" placed in the SE therapy group and so on. The large number of available subjects in this group and the general nature of the SE approach to therapy indicates the potential usefulness of this control group.

### Statement of Hypotheses

The hypothesis for the first portion of this research can be stated more specifically.

Hypothesis 1. The SM "pure profile" group will have more feeling and tensional responses and less neutral responses after completing the SM therapy group than other personality profiles in the SM treatment group and SM pure profiles in a

general SE treatment group. These three scoring categories as described by table 3 will compare pre-and post-EPT change scores for the comparison groups by using the Kruskal-Wallis one-way analysis of variance procedure.

Hypothesis 2. The ER "pure profile" group will have more actional, neutral and relaxed responses and less tensional responses after completing the ER therapy group than other personality profiles in the ER therapy group and ER "pure profiles" in a more general SE treatment group. These four scoring categories as described by table 3 will be compared by using pre-and post-EPT change scores for these comparison groups using the Kruskal-Wallis one-way analysis of variance procedure.

Hypothesis 3. The EI "pure profile" group will have more neutral and relaxed responses and less tensional responses after completing the EI therapy group than EI "pure profiles" in a more general SE treatment group. These three scoring categories as described by table 3 will be compared by using the pre- and post-EPT change scores for the comparison groups using the Kruskal-Wallis one-way analysis of variance procedure.

The second portion of this study will examine the "pure profiles" before therapy to view any affective differences between the pre-therapy "pure profile" with specific hypotheses:

Hypothesis 4. The SM "pure profile" group will have more actional and neutral responses and fewer tensional responses

than the other "pure profiles". These three scoring categories described in table 3 will be compared using ANOVA with a Duncan post ANOVA procedure.

Hypothesis 5. The ER "pure profile" group will have more feeling and tensional responses and less actional responses than the other "pure profiles". These scoring categories as described in table 3 will be compared using ANOVA with Duncan post ANOVA procedure.

Hypothesis 6. The EI profile group will have more relaxed and less tension and neutral responses than other "pure profiles". These three scoring categories described in table 2 will be compared using ANOVA with Duncan post ANOVA procedure.

The final portion of this research project examines the EPT as an instrument to differentiate alcoholics from control subjects.

The EPT protocols for both groups will be scored using selected categories from Glad's interpersonal personality synopsis model along with other related scoring categories described. Specific methods to test the hypotheses are described as follows:

Hypothesis 7. Alcoholics will have more non-feeling, neutral (thinking, wondering, talking) responses than will the control group. The neutral tonus scoring (see table 3) described by Glad (1959) will be compared for both the alcoholic and control group by means of a simple analysis of variance. (ANOVA)

Hypothesis 8. Alcoholics will have more hostile, angry responses than the control group. Responses with the context of hostility and anger will be included in this comparison. Some representative samples scored include angry, sneering, hostile, cursing, furious, etc. The total number of angry responses for alcoholic and the control group will be compared by a simple ANOVA.

Hypothesis 9. Alcoholics will have more drinking responses than the control group (he's drunk, he's feeling drunk, he's feeling woozy from drinking). Responses associated with drinking or feelings attached to drinking will be scored in this category. The total number of responses for the two groups will be compared by a simple ANOVA.

Hypothesis 10. Alcoholics will see more actional, behavioral responses than the control group (he's crying, he's yelling). Glad's (1959) interpersonality model scoring system will be used. Total actional responses of the two groups will be compared using a simple ANOVA.

Hypothesis 11. Alcoholics will have a fewer number of unique responses than the control group. Totals for both groups will be tabulated for unique answers or responses that have not been previously used. Alcoholics and controls will be compared using simple ANOVA.

Hypothesis 12. Alcoholics will have a larger number of rejections or responses left blank than the control group. The total number of rejections for both alcoholic and control groups will be tabulated and compared using simple ANOVA.

People reporting that they are excessive drinkers or have been hospitalized for drinking were included in the control group. Other categories will be scored strictly by Glad's (1959) system.

## RESULTS

The data provided in the results are chronologically presented concordantly with the three sections of this research as described previously. Before presenting the results it may be helpful to fully summarize the clusterings of "pure profiles" with the Linear Typal Analysis. This procedure groups individual people into clusters in this study by using ICL and TAT scores obtained prior to therapy. The results of similar patterns of patient scores using Glad's data pool were combined to yield means of TAT and ICL scores yielding five pure type profiles. Each individual was classified according to the closeness of fit to a "pure profile" type. Table 1 shows the five profiles and the number of individuals that fall within that cluster. The individuals appear to be numerically spread out fairly evenly within the different profiles ranging from eight individuals in profile 1 to sixteen individuals in profile 2. Also it can be seen that different "pure profile" individuals are scattered throughout the various therapy groups. This hypothesized scatter allows for the comparison of specific "pure profile" individuals in one therapy group as compared with people with similar profiles in a different therapy group. For example, pure profile 5 individuals in the ER group can be compared to the pure profile 5 individuals in the SE therapy group. Such a comparison would provide 5 and 4 subjects in the two groups respectively. A further description of the five "pure profiles" may be helpful.

The description of the five "pure profiles" includes characteristics of those individuals in that group. This description includes the number of objects, sex, therapy group placement, and description of the test score patterns using the TAT and ICL. The "pure profiles" are labeled numerically from the values of one through five along with appropriate names for the groups.

#### Pure Profile 1

Pure profile 1 consists of 8 subjects scattered throughout the four treatment groups with 4 in the SE, 2 in the ER, and 1 in each of the SM and EI groups. This profile includes the fewest number of subjects as compared to the other profiles having subject ranging from 13 to 16 out of a total of 66 subjects included in the Lyneer Typal Analysis. Out of the eight subjects in this "pure profile", four were male and four were female. These "pure profile" individuals appeared to be spread proportionately throughout the therapy groups.

The description of this group of people is obtained from the mean profiles. Self descriptions of this "pure profile" show that they are more passive, detached, independent and are self-centered, cold, and unresponsive to other people. They show less expression of feeling and animation and are more controlled in their approach. They tend to see their ideal selves as less dictatorial, competitive, and aggressive but not overconventional or overconsiderate of people. They describe their mothers and fathers similarly as more dependent, docile, and willing to be led by others. They also describe both

parents as cooperative, conventional and willing to be influenced by others.

This profile of individuals may be labeled as passive-independent with people that appear to be independent without being overtly rebellious or overconventional. They tend to be controlled and usually lack animation and enthusiasm. They do not clearly fall into any treatment group but would probably be more appropriate for the SM group.

#### Pure Profile 2

This profile cluster consists of 16 individuals with 10 males and 6 females. The subjects were spread out within the treatment groups but proportionately more were placed in the EI group with 5 subjects. Seven of the 30 SE subjects were pure profile 2 with 3 subjects in the SM treatment group and 1 in the ER treatment group.

Descriptively, these individuals stand out in their differences from the other "pure profiles" by their responses to the TAT cards. They are more responsible and accept the consequences of their actions. They are more optimistic, hopeful, and have a positive outlook. They accept their emotions, capabilities, and limitations and are oriented toward interacting with others. They present as open and honest toward their feelings and are generally committed to growth and development. They see themselves as more aggressive and expect others to look positively toward them. They do not perceive their fathers as docile or dependent but more competitive and self-centered.



This group may be labeled as the healthy group. They tend to be more responsible, optimistic and accepting of their feelings and others. These individuals would probably be able to benefit from the EI where healthier individuals appear to be a prerequisite for this psychoanalytically oriented therapy. Strikingly, there are more of this "pure profile" proportionately placed in the EI treatment group.

### Pure Profile 3

There are 15 individuals that were clustered in this "pure profile" with one male and fourteen females. They are spread out proportionately between the four treatment groups with 8 in the SE, 3 in the ER group and 2 in each of the SM and EI therapy groups.

The most outstanding difference between this profile and the other four profiles is the predominance of females in the group and their description of mother. They describe her as not being comforting, kind, or protective. She tends to be more aggressive, hard hearted, cold and autocratic. She is presented as more rebellious, distrustful and unwilling to be docile or dependent. Father is described as more passive, quiet, warm and generally not possessing those qualities that characterize mother. The individuals in this profile describe themselves as more self-oriented, self-effacing, and too willing to give and protect others. They tend to be more distrustful and feel rebellious. They tend to be more active and animated and lack constriction.

This group could be labeled the mother dominated group where mostly females in the "pure profile" cluster describe their mother as dominant, autocratic, cold and unfeeling. They describe their fathers as more passive, warm, and quiet. These individuals would probably be placed in the ER therapy group but the data does not show a greater proportional placement.

#### Pure Profile 4

There are 14 individuals in this "pure profile" cluster with 8 females and 6 males. There are proportionately more people with this "pure profile" type placed in the SM group with 4 subjects and 7 in the SE group. In the other groups 2 were placed in the ER group and one in the EI group.

The most outstanding quality in describing this "pure profile" group is the lack of reality orientation and the rebelliousness of these individuals. They tend to have difficulty differentiating themselves from their environment and have difficulty presenting things in the usual means-ends relationships. They describe themselves ideally as more distrustful, rebellious, and suspicious. They see themselves ideally as more self-punishing and autocratic. They tend to have more sick decision processes in that they are committed to avoid problem solutions and less willing to develop and grow with purposeful planning. They see themselves as more self-effacing, dependent, and clinging. They tend to be less self-accepting, optimistic, and willing to express their feelings. They describe their fathers as more

hard hearted, sadistic, cold and distrustful. They see their mother as more self-effacing, passive, and willing to obey.

This group can be labeled as the sick group. They have a poor reality orientation and have difficulty delineating themselves from their environment. They are committed to avoid problem solutions and present themselves as rebellious, distrustful, paranoidal individuals. These individuals would perhaps be best treated in the SM group according to the Sullivanian approach to treatment. Strikingly, more individuals in this profile were placed in the SM group as compared to the other therapy groups.

#### Pure Profile 5

There were 13 individuals that clustered in pure profile 5 with 9 females and 4 males. They were spread out with placement in all treatment groups but more were placed in the ER group with 5 individuals, than any other treatment group. Four were placed in the SE group, and two in each of the SM and EI groups.

The description of the individuals in this cluster appears to show a quality of passiveness. Descriptions of mother and father are similar. They tend to be less aggressive, competitive, rebellious, distrustful, and more quiet, accepting, and other oriented. People with this profile describe themselves as more passive, inactive, compliant, but willing to share feelings and oriented towards others.

This group could be called the passive group and would likely be placed in the ER group for treatment. Significantly,

there are proportionately more pure profile 5 individuals that were placed in the ER group than the other treatment groups.

This brief description of the "pure profiles" gives a basic picture of the five clusters of profile types. These clusters as described may be used as one type of criteria to look at differential interactions of one type of person in one therapy modality as compared to that same type of person in another therapy orientation. The following sections will describe the results of these comparisons.

The first portion of this analysis will be presented with the results of the comparison of "pure profile" groups of individuals placed in appropriate groups as contrasted with the inappropriate group placements. The results of the first three hypotheses will be examined. This involves looking at the SM, ER, and EI "pure profile" types which most closely fit Pure Profiles 4, 5, and 2 respectively. These "pure profiles" were placed throughout the different therapy groups where they initially started therapy which allows for a comparison of those personality profiles placed in different groups. The first "pure profile" comparison that will be examined is the SM "pure profile" or pure profile 4 in different groups.

The results of comparing Pure Profile 4 individuals placed in the SM therapy group with Pure Profile 4 individuals in the SE group can be seen in table 4. There were no significant differences in the change scores between the

different placement of Pure Profile 4 individuals on the three EPT scoring dimensions of feeling, tensional, and neutral categories. Table 5 also shows a comparison of these three EPT categories of Pure Profile 4 individuals in the SM group with all other "pure profile" people in that group. Again, no significance was obtained. These data indicates that Hypothesis 1 is not supported.

A comparison of Pure Profile 5 individuals in the ER therapy group with Pure Profile 5 individuals in the SE therapy group can be seen in table 6. The comparison of the change scores of the two groups on the feeling, tensional, neutral, and relaxed EPT scores were all insignificant. A comparison of all other "pure profiles" placed in the ER group with Pure Profile 5 individuals in the ER group also showed no significant differences on those same scoring categories. These results can be viewed in table 7. These data indicates that Hypothesis 2 is not supported.

The last series of comparisons in this portion of the research looks at Pure Profile 2 individuals placed in the EI group as compared to Pure Profile 2 individuals placed in the SE therapy group. These results can be viewed in table 8 which show no significant difference between the change scores of the two groups on the tensional, neutral, and relaxed scoring categories of the EPT. Table 9 also shows no significant results on these EPT scoring categories in comparing Pure Profile 2 individuals in the EI group with all other "pure profiles" people in that same therapy group. These data indicate that Hypothesis 3 is not supported.

TABLE 4

COMPARISON OF PURE PROFILE 4 INDIVIDUALS PLACED IN THE SM THERAPY GROUP WITH PURE PROFILE 4 INDIVIDUALS PLACED IN THE SE THERAPY GROUP ON THE FEELING, TENSIONS, AND NEUTRAL SCORING CATEGORIES OF THE EPT USING RANK ORDERS.

| Comparison of the <u>EPT</u> Scores           |                    |              |          |                   |                                |                   |
|---|--------------------|--------------|----------|-------------------|--------------------------------|-------------------|
| GROUP   | NO. OF<br>subjects | mean<br>rank | $\chi^2$ | signif-<br>icance | $\chi^2$ corrected<br>for ties | signif-<br>icance |
| Comparison of EPT Feeling Scores              |                    |              |          |                   |                                |                   |
| Pure Profile 4<br>people in the<br>SM group   | 4                  | 4.45         | .893     | .345              | .897                           | .344              |
| Pure Profile 4<br>people in the<br>SE group   | 7                  | 6.71         |          |                   |                                |                   |
| Comparison of the <u>EPT</u> Tensional Scores |                    |              |          |                   |                                |                   |
| Pure Profile 4<br>people in the<br>SM group   | 4                  | 7.75         | 1.750    | .186              | 1.766                          | .184              |
| Pure Profile 4<br>people in the<br>SE group   | 7                  | 5.00         |          |                   |                                |                   |
| Comparison of the <u>EPT</u> Neutral Scores   |                    |              |          |                   |                                |                   |
| Pure Profile 4<br>people in the<br>SM group   | 4                  | 5.00         | .571     | .450              | .585                           | .444              |
| Pure Profile 4<br>people in the<br>SE group   | 7                  | 6.57         |          |                   |                                |                   |

TABLE 5

COMPARISON OF PURE PROFILE 4 INDIVIDUALS PLACED IN THE SM THERAPY GROUP WITH ALL OTHER PURE PROFILE INDIVIDUALS (1,2,3,5) PLACED IN THE SM THERAPY GROUP ON FEELING, TENSIONAL, AND NEUTRAL SCORING CATEGORIES OF THE EPT USING RANK ORDERS.

| Comparison of the <u>EPT</u> Scores                  |                 |           |          |              |                             |              |
|--|-----------------|-----------|----------|--------------|-----------------------------|--------------|
| GROUP  | No. of subjects | mean rank | $\chi^2$ | significance | $\chi^2$ corrected for ties | significance |
| Comparison of the <u>EPT</u> Feeling Scores          |                 |           |          |              |                             |              |
| Pure Profile 4 people placed in SM group             | 4               | 5.00      | 1.038    | .308         | 1.061                       | .303         |
| Other Pure Profiles (1,2,3,5) placed in the SM group | 8               | 7.25      |          |              |                             |              |
| Comparison of the <u>EPT</u> Tensional Scores        |                 |           |          |              |                             |              |
| Pure Profile 4 people placed in SM group             | 4               | 8.38      | 1.623    | .203         | 1.640                       | .200         |
| Other Pure Profiles (1,2,3,5) placed in the SM group | 8               | 5.56      |          |              |                             |              |
| Comparison of the <u>EPT</u> Neutral Scores          |                 |           |          |              |                             |              |
| Pure Profile 4 people placed in SM group             | 4               | 5.63      | .353     | .552         | .361                        | .548         |
| Other Pure Profiles (1,2,3,5) placed in the SM group | 8               | 6.94      |          |              |                             |              |

TABLE 6

COMPARISON OF PURE PROFILE 5 INDIVIDUALS PLACED IN THE ER THERAPY GROUP WITH PURE PROFILE 5 INDIVIDUALS PLACED IN THE SE THERAPY GROUP ON THE FEELING, TENSIONAL, NEUTRAL AND RELAXED SCORING CATEGORIES OF THE EPT USING RANK ORDERS.

| Comparison of the <u>EPT</u> Scores           |                 |           |          |              |                             |              |
|---|-----------------|-----------|----------|--------------|-----------------------------|--------------|
| GROUPS  | No. of subjects | mean rank | $\chi^2$ | significance | $\chi^2$ corrected for ties | significance |
| Comparison of the <u>EPT</u> Feeling Scores   |                 |           |          |              |                             |              |
| Pure Profile 5 people placed in ER group      | 5               | 5.10      | .015     | .903         | .015                        | .902         |
| Pure Profile 5 people placed in SE group      | 4               | 4.88      |          |              |                             |              |
| Comparison of the <u>EPT</u> Tensional Scores |                 |           |          |              |                             |              |
| Pure Profile 5 people placed in ER group      | 5               | 5.50      | .375     | .540         | .381                        | .537         |
| Pure Profile 5 people placed in SE group      | 4               | 4.38      |          |              |                             |              |
| Comparison of the <u>EPT</u> Neutral Scores   |                 |           |          |              |                             |              |
| Pure Profile 5 people placed in ER group      | 5               | 5.90      | 1.215    | .270         | 1.236                       | .266         |
| Pure Profile 5 people placed in SE group      | 4               | 3.88      |          |              |                             |              |
| Comparison of the <u>EPT</u> Relaxed Scores   |                 |           |          |              |                             |              |
| Pure Profile 5 people placed in ER group      | 5               | 5.20      | .060     | .806         | .062                        | .803         |
| Pure Profile 5 people placed in SE group      | 4               | 4.75      |          |              |                             |              |



TABLE 7

COMPARISON OF PURE PROFILE 5 INDIVIDUALS PLACED IN THE ER THERAPY GROUP WITH ALL OTHER PURE PROFILE INDIVIDUALS (1,2,3,4) PLACED IN THE ER THERAPY GROUP ON FEELING, TENSIONAL, NEUTRAL, AND RELAXED SCORING CATEGORIES OF THE EPT USING RANK ORDERS.

| Comparison of the <u>EPT</u> Scores              |                 |           |          |              |                             |              |
|--|-----------------|-----------|----------|--------------|-----------------------------|--------------|
| GROUPS   | No. of subjects | mean rank | $\chi^2$ | significance | $\chi^2$ corrected for ties | significance |
| Comparison of the <u>EPT</u> Feeling Scores      |                 |           |          |              |                             |              |
| Pure Profile 5 people placed in ER group         | 5               | 8.10      | .648     | .421         | .652                        | .419         |
| Other Pure Profiles (1,2,3,4) placed in ER group | 8               | 6.31      |          |              |                             |              |
| Comparison of the <u>EPT</u> Tensional Scores    |                 |           |          |              |                             |              |
| Pure Profile 5 people placed in ER group         | 5               | 7.70      | .263     | .608         | .268                        | .605         |
| Other Pure Profiles (1,2,3,4) placed in ER group | 8               | 6.56      |          |              |                             |              |
| Comparison of the <u>EPT</u> Neutral Scores      |                 |           |          |              |                             |              |
| Pure Profile 5 people placed in ER group         | 5               | 8.10      | .648     | .421         | .659                        | .417         |
| Other Pure Profiles (1,2,3,4) placed in ER group | 8               | 6.31      |          |              |                             |              |
| Comparison of the <u>EPT</u> Relaxed Scores      |                 |           |          |              |                             |              |
| Pure Profile 5 people placed in ER group         | 5               | 7.10      | .005     | .942         | .005                        | .941         |
| Other Pure Profiles (1,2,3,4) placed in ER group | 8               | 6.94      |          |              |                             |              |

TABLE 8

COMPARISON OF PURE PROFILE 2 INDIVIDUALS PLACED IN THE EI THERAPY GROUP WITH PURE PROFILE 2 INDIVIDUALS PLACED IN THE SE THERAPY GROUP ON THE TENSIONAL, NEUTRAL, AND RELAXED SCORE CATEGORIES OF THE EPT USING RANK ORDERS.

| Comparison of the <u>EPT</u> Scores           |                 |           |          |              |                             |              |
|---|-----------------|-----------|----------|--------------|-----------------------------|--------------|
| GROUPS  | No. of subjects | mean rank | $\chi^2$ | significance | $\chi^2$ corrected for ties | significance |
| Comparison of the <u>EPT</u> Tensional Scores |                 |           |          |              |                             |              |
| Pure Profile 2 people in the EI group         | 5               | 6.70      | .026     | .871         | .027                        | .871         |
| Pure Profile 2 people in the SE group         | 7               | 6.36      |          |              |                             |              |
| Comparison of the <u>EPT</u> Neutral Scores   |                 |           |          |              |                             |              |
| Pure Profile 2 people in the EI group         | 5               | 6.50      | 0.       | 1.000        | 0.                          | 1.000        |
| Pure Profile 2 people in the SE group         | 7               | 6.50      |          |              |                             |              |
| Comparison of the <u>EPT</u> Relaxed Scores   |                 |           |          |              |                             |              |
| Pure Profile 2 people in the EI group         | 5               | 5.60      | .534     | .465         | .564                        | .453         |
| Pure Profile 2 people in the SE group         | 7               | 7.14      |          |              |                             |              |

TABLE 9

COMPARISON OF PURE PROFILE 2 INDIVIDUALS PLACED IN THE EI THERAPY GROUP WITH OTHER PURE PROFILE INDIVIDUALS (1,3,4,5) PLACED IN THE EI THERAPY GROUP ON THE TENSIONAL, NEUTRAL, AND RELAXED SCORING CATEGORIES OF THE EPT AS MEASURED BY RANKS.

| Comparison of the <u>EPT</u> Scores                        |                 |           |          |              |                             |              |
|--|-----------------|-----------|----------|--------------|-----------------------------|--------------|
| GROUPS   | No. of subjects | mean rank | $\chi^2$ | significance | $\chi^2$ corrected for ties | significance |
| Comparison of the <u>EPT</u> Tensional Scores              |                 |           |          |              |                             |              |
| Pure Profile 2 people placed in the EI group               | 5               | 5.10      | .675     | .411         | .681                        | .409         |
| Other Pure Profile people (1,3,4,5) placed in the EI group | 6               | 6.75      |          |              |                             |              |
| Comparison of the <u>EPT</u> Neutral Scores                |                 |           |          |              |                             |              |
| Pure Profile 2 people placed in the EI group               | 5               | 7.40      | 1.633    | .201         | 1.679                       | .195         |
| Other Pure Profile people (1,3,4,5) placed in the EI group | 6               | 4.83      |          |              |                             |              |
| Comparison of the <u>EPT</u> Relaxed Scores                |                 |           |          |              |                             |              |
| Pure Profile 2 people placed in the EI group               | 5               | 4.90      | 1.008    | .315         | 1.041                       | .307         |
| Other Pure Profile people (1,3,4,5) placed in the EI group | 6               | 6.92      |          |              |                             |              |

The results of the next portion of this research project looks at the comparison of the five "pure profiles" before therapy to see if there were any significant differences on specific EPT scores. More specifically the EPT scores of tension, neutral, relaxed, and actional categories were compared among all five profiles. The results can be seen in table 10 using a simple ANOVA. The results showed no significant F ratio indicating that the "pure profile" groups did not differ in the four scoring categories of the EPT. The hypothesis made concerning the different profiles based on probable group clusters from Avery's (1976) previous research, were not supported. However, the groups were usually ordered according to hypothesized ranks though not significantly different. "Hypotheses 4, 5, and 6 are rejected."

The last section of this research project compares hospitalized alcoholic inpatients with controls on six scoring categories of the EPT. The results can be viewed on table 11. Three scoring categories were significantly different for the alcoholics as compared to the controls. Alcoholics had significantly less unique responses ( $p < .001$ ) than the control group. In other words, alcoholics tended to repeat the same response and had fewer original responses than the control group. Also, alcoholics had significantly more ( $p < .001$ ) actional rather than feeling responses as compared to the control group. Finally, alcoholics left responses blank or rejected cards significantly ( $p < .01$ ) more than the controls. Hypotheses 10, 11, and 12 are supported.

TABLE 10

DIFFERENCES IN PURE PROFILES ON EPT SCORING DIMENSIONS  
PRIOR TO THERAPY.

| Pure Profile<br>Scores         | Analysis of Variance |      |        |  |
|--------------------------------|----------------------|------|--------|--|
|                                | F ratio              | dF   | F Prob | Post ANOVA (Duncan)                            |
| Tensional<br><u>EPT</u> Scores | 2.199                | 4/61 | .0796  | Pure Profile 3 greater<br>than Pure Profile 1. |
| Neutral <u>EPT</u><br>Scores   | .606                 | 4/61 | .6599  | No difference                                  |
| Relaxed <u>EPT</u><br>Scores   | .743                 | 4/61 | .5664  | No difference                                  |
| Actional <u>EPT</u><br>Scores  | 1.336                | 4/61 | .2667  | No difference                                  |

Alcoholics also tended to have more angry and drinking responses than the controls but the results only approached significance. Hypothesis 8 and 9 are not supported although the results approach significance. There was no significant difference found between the two groups in comparing neutral EPT scores. Hypothesis 7 was not supported.

TABLE 11

COMPARISON OF THE ALCOHOLIC GROUP WITH THE CONTROL GROUP ON  
NEUTRAL, ANGRY, DRINKING, UNIQUE, ACTIONAL, AND REJECTION SCORING  
CATEGORIES OF THE EPT.

| Analysis of Variance  |                                      |          |       |                |        |                   |
|-----------------------|--------------------------------------|----------|-------|----------------|--------|-------------------|
| Scoring<br>Categories | Sum of<br>Squares<br>main<br>effects | residual | df    | mean<br>square | F      | signif-<br>icance |
| Neutral               | 2.109                                | 686.118  | 1/104 | 2.109          | .320   | .573              |
| Angry                 | 12.876                               | 427.086  | 1/104 | 12.876         | 3.136  | .080              |
| Drinking              | 6.773                                | 205.388  | 1/104 | 6.773          | 3.429  | .067              |
| Unique                | 437.114                              | 2856.621 | 1/104 | 437.114        | 15.914 | .000***           |
| Actional              | 517.527                              | 3874.595 | 1/104 | 517.527        | 13.891 | .000***           |
| Rejection             | 77.792                               | 1157.67  | 1/104 | 77.792         | 6.989  | .009**            |

\*  $p < .05$

\*\*  $p < .01$

\*\*\*  $p < .001$

## DISCUSSION AND CONCLUSIONS

The results of the first portion of this research are striking because they are consistently negative. Each hypothesis involves several scoring categories of the EPT that are interrelated but all the findings show insignificant difference between similar profile people placed in different therapy groups. One would assume that differential placement of individual profiles into different therapy groups would result in differential change. The results do not support this assumption that there is some interaction between personality style and treatment orientations. There may be some possible reasons for these negative results.

One explanation may be the small number of subjects used for the comparison. The number of subjects compared range from 4 to 7. Using non-parametric statistics to show significance and the traditional alpha at .05, a large difference between the groups is needed to show a statistically significant difference.

However, most of the differences predicted in the EPT scoring categories between the two groups were in the hypothesized direction. Although no conclusions can be drawn from concurrence of directions of differences, the EPT may need further study. The difficulty of taking into account the many aspects involved in comparing therapists, treatment, and patient variables makes this examination exceedingly difficult. The low number of subjects in this comparison is



actually the narrowing of 2000 patients that were part of Glads' data pool. Comparison of groups of 4 or 5 people from this number indicates some of the problems in separating these variables and comparing them with a reasonable statistical sample.

Another possible explanation for these results may be the criteria for correct group placement. The ICL and TAT scores were grouped and analyzed using the Linear Typal Analysis. This procedure is similar to Avery's (1976) except this study used only people classified as finishers of therapy where Avery used individuals who terminated through-out therapy. The profiles obtained by using finishers in this study did not match the five "pure profiles" obtained by Avery (1976). In fact some individuals who were finishers in Avery's profiles that were not classed in the same "pure profile" but were separated into different "pure profiles" in this present analysis. In spite of these inconsistencies most grouped together in Avery's study were grouped together in this study. The differences in profiles seems to imply that groupings of individuals who are finishers of therapy may be quite different than groupings of people that dropped out at a different period of treatment. Such a criteria for group placement has a margin of error that may compound the already small number of subjects used to make the comparisons between groups. Possibly more specific criteria for group placement may help the understandability of the placement into therapy groups.

Finally, a possibility that must be examined is the usefulness of the EPT in examining change in therapy. Strikingly, many of the pre- and post-EPT scores on the categories examined were many times identical. Though different individual variations had a large range of values, pre- and post-therapy scores were very similar. There appeared to be a marked internal consistency that was difficult to explain with the apparent variation of different profile types of people. Though the EPT has been effective in other studies (Jeffers, 1955; Miller, Hayne, Thompson, and Glad, 1956) in differentiating change in therapy, it appears to be less effective, at least with this sample of people.

The hypotheses that changes are greater when individuals are selectively placed in therapy groups do not appear to be supported by this study. The reason for the negative results is unclear and the previously described factors may play some part in these results. Correct patient treatment interaction may produce more change concordant with that treatment interaction but the EPT may not be the most sensitive measure of affective change.

The second portion of this study examines the use of the EPT in differentiating groups of people. The groups of people for this section were the "pure profile" people separated by the TAT and ICL. The EPT was then used to see if there were any differences in scores from the five "pure profiles". It was assumed from Avery's (1976) previous study that the "pure profiles" would be similar and various apriori hypotheses were

made concerning different EPT scores with particular profiles. The tensional, neutral, relaxed, and actional scoring categories were compared for the five "pure profiles".

The results as described previously were again strikingly not significant. For all F ratios, none were significant. Only the tensional EPT scoring category approached significance ( $p < .0796$ ). Post ANOVA analysis using the Duncan procedure showed only the mother dominant group or Pure Profile 3 as having significantly more tensional response on pre- EPT's than the passive-independent group or Pure Profile group 1. All other post ANOVA analyses were insignificant thus concordant with insignificant F ratios. The absence of any differences with these five groups is remarkable. The EPT does not appear to be effective in separating groups clustered by using the TAT & ICL. There may be some possible explanations for these negative results.

The EPT may be measuring something quite different than that measured by the TAT & ICL. Looking at the EPT scores and the affective dimension may be a relatively independent factor not primarily tapped by the ICL & TAT.

Separation of groups that were defined to cluster according to TAT & ICL scores may not be the most appropriate method if one is looking at the affective component of the personality additionally. The smaller number of subjects in each "pure profile " make it more difficult to show significant differences between the "pure profile" groups.

The EPT has been hypothesized as a potentially powerful and swift tool to differentiate different groups of people to aid in therapy placement. Using "pure profiles" as a criterion for group placement, it appears that with the Glad data and using protocol's of only finishers of therapy, the EPT appears to be less than effective in differentiating people.

The final portion of this research again uses the EPT to differentiate two groups of people. These groups are alcoholics and a control that was screened for excessive alcohol consumption. As contrasted with the previous section, most of the results in this portion were significant or approached significance. The basic premise with the alcoholic group was that they would have more difficulty identifying, labeling, and verbalizing affective responses to the EPT.

Two scoring categories showed that the alcoholics had difficulty producing and using affective words. They had significantly fewer unique responses than the control group. The controls tended to have even more responses than were tabulated because a maximum of one unique response per card was allowed. In fact, the controls frequently had three or four related responses for the same card. The typical alcoholic EPT response was one word or frequently left blank. The alcoholics also had significantly more rejection of items or blanks. This appeared to be one step further in not being able to produce feeling response on the EPT. These results were additionally impressive because it was usually quite

easy to sort out the EPT protocols as to alcoholics and non-alcoholics just by looking at the number of responses for items and the number of blanks. The alcoholics generally had one word responses such as angry, sad, and happy which were repeated through the protocols. The non-alcoholics tended to have more varied response and as many as five responses for the same card.

Somewhat related to the alcoholics' difficulty in producing affective responses is the actional scoring category. The alcoholic has significantly more actional or behavioral responses (he's crying, he's yelling) than the control group. The controls conversely had more feeling responses than the alcoholics. It appears that behavioral descriptions of what happens with certain feelings is one way of distancing themselves from painful and pleasant feelings. This finding appears to go hand in hand with the alcoholics' lack of contact and use of feeling words and vocabulary. It may be that the alcoholic is defending himself from different feelings by denying them or by putting himself at a distance from them. Indeed, some clinicians say that alcoholics use drinking as a method of dealing with difficulties and feelings related to those difficulties.

One of the feelings that some researchers describe as being central for an alcoholic is anger or hostility. Although the results on this scoring category are not significant, the data show that alcoholics tended to have slightly more angry responses. Perhaps alcoholics have difficulty expressing

angry feelings on such a straight forward projective or may attempt to cover up such feelings as a way of defending against the painful feelings. Further study appears to be necessary to draw any conclusions concerning this EPT scoring category. Potentially this dimension appears fruitful for further exploration.

The last scoring category that approached significance was the drinking category. Subjective reports of alcoholics indicated that they thought all the people in the pictures were drinking but failed to respond in that manner on the EPT. Those subjects who responded with drinking response usually had a good number while most subjects had no scoring in this dimension. The scoring of the drinking response appeared to be somewhat uncommon on the protocols but appeared to be more frequent in the alcoholic group. The few controls that had drinking responses usually had a good number, though they were fewer in number. The results however, only approached significance showing that the alcoholics tended to have more drinking responses. Possible significance of a drinking response may be helpful in separating those that drink. Further study in this area appears to be potentially beneficial.

The EPT appears to be useful in differentiating alcoholics from non-alcoholics. The specific hypothesis about the different groups appears to be best tested when based on the specific dynamics of a group and when specific EPT scoring categories are adapted those specific dynamics as was done with the

alcoholic group. This procedure can also be seen in other studies (Hayne, 1950; Thaler, Weiner, & Reiser, 1957) where specific scoring categories were developed along hypothesized dimensions. Perhaps a more specific description of the "pure profile" groups and concomitant EPT scoring categories may have been more helpful in separating affective qualities of these groups of people.

The problem that this project examines is the measurement of change and affective personality qualities of people in relationship to psychotherapy. The EPT appeared to be a swift but not as powerful assessment tool in measuring affective personality dimension as hoped for. The EPT appeared to be particularly unsuccessful in detecting a difference in affective change when patients were matched for correct group placement in different therapy groups. Incorrect placement was hypothesized to produce less change according to the treatment orientation. Unfortunately the changes were not significant. Additionally, the EPT was not useful in separating the "pure profile" dimension before therapy placement. The premise was that the EPT could be used as a swift projective in assessing personality dimensions to aid in group placement. The only potentially valuable outcome from the examination of different group scores on the EPT comes from examining the alcoholic population. In comparing this patient subpopulation the EPT was found to be a powerful tool in separating groups of patients. The implications for therapy placement would be somewhat different with these results.

In conclusion, the EPT appears to be valuable as a projective tool when specific dynamic hypotheses are made concerning differential groupings of individuals. The hypothesis of the interaction of the patient variables and treatment orientation was not confirmed indicating that further study and research is necessary. The difficulty in attempting such a complex study examining different aspects of this interaction appears evident. The purpose of this study was to attempt to combine more than one specific aspect of the complex issue of measurement. Hopefully the EPT can be examined in further studies following up potential leads provided by this research.



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#### VITA

Capt. Jack Wagoner graduated from the United States Air Force Academy in June of 1973. He was commissioned as an officer in the United States Air Force and was assigned to go to graduate school at Purdue University where he received a Masters of Science in Psychology in December of 1973. He was then stationed at Eglin AFB in Florida for a year and a half working as a Behavioral Scientist and as a Clinical Psychologist. He was reassigned to graduate school at Louisiana State Univeristy in August of 1975. Upon completion of his PhD degree he will serve as a Clinical Psychologist in the Air Force and is presently assigned to Chanute AFB in Illinois.